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The Life of the Kitchen.®

Installation Instructions

Integrated Ventilation System

For Use with Models:

IVS1, IVSR1, IVS2, IVSR2

Part No. 65278 Rev. E

Table of Contents

Important Safety Instructions 1
Important Information About Safety Instructions 1
General Safety Precautions 2
Product Specifications 3
General Specifications 3
Product Dimensions 3
Installation Requirements 4
Electrical Requirements 4
Planning the Duct Work 4
Installation Instructions 6
Installing the IVS 6
Installing the Duct Work 6
Electrical Connection 6
Verifying Proper Operation 7
Installation Checklist 7
Notes 8

Before You Begin...

Important

- **Installer:** In the interest of safety and to minimize problems, read these installation instructions completely and carefully before you begin the installation process. Leave these installation instructions with the customer.
- **Customer:** Keep these installation instructions for future reference and the local electrical inspector's use.

If you have questions or problems with installation, contact your Dacor dealer or the Dacor Customer Service Team.

Dacor Customer Service

Phone: (800) 793-0093.
Web site: www.Dacor.com

All specifications subject to change without notice. Dacor® assumes no liability for changes to specifications.

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Important Safety Instructions

Important Information About Safety Instructions

- The ***Important Safety Instructions*** and warnings in these instructions are not meant to cover all possible problems and conditions that can occur. Use common sense and caution when installing, maintaining or operating this or any other appliance.
- Always contact the Dacor Customer Service Team about problems and conditions that you do not understand.

Safety Symbols and Labels

⚠ DANGER

Immediate hazards that **WILL** result in severe personal injury or death.

⚠ WARNING

Hazards or unsafe practices that **COULD** result in severe personal injury or death.

⚠ CAUTION

Hazards or unsafe practices that **COULD** result in minor personal injury or property damage.

⚠ DANGER

To avoid the possibility of explosion or fire, do not store or use combustible, flammable or explosive vapors and liquids (such as gasoline) inside or in the vicinity of this or any other appliance. Also keep items that could explode, such as aerosol cans away from cooktop burners, ovens and range hoods. Do not store flammable or explosive materials in adjacent cabinets or areas.

⚠ WARNING

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

a) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

b) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

⚠ WARNING

WARNING – TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.

b) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

c) When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

d) Ducted fans must always be vented to the outdoors.

⚠ WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

READ AND SAVE THESE INSTRUCTIONS

Important Safety Instructions

General Safety Precautions

To reduce the risk of fire, electric shock, serious injury or death when using your appliance, follow basic safety precautions, including the following:

⚠ WARNING

1. Do not install or operate this appliance if it has been damaged, dropped, has damaged electrical wires or is not working properly. If the product is damaged when received, immediately contact the dealer or builder.
2. This appliance must be installed and grounded by a qualified installer according to these installation instructions.
3. TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCTWORK.
4. Install or locate this appliance only in accordance with these installation instructions and the requirements specified by the manufacturer of the cooktop or range. Improper installation, adjustment, alteration, service or maintenance can cause serious personal injury or property damage.
5. The customer should not install, repair or replace any part of this appliance unless specifically recommended in the literature accompanying it. A qualified service technician should perform all other service. Contact the nearest Dacor authorized service representative at (800) 793-0093, or at www.Dacor.com for examination, repair or adjustment.
6. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
7. Keep all packaging materials away from children. Plastic bags can cause suffocation.
8. The installer must show the customer the location of the fuse box or circuit breaker panel so that the customer knows where and how to turn the power off.
9. Read the use and care manual completely before using the appliance. Clean the appliance only as instructed in the use and care manual. Use only the cleaners specified.
10. Do not tamper with the controls.
11. Never allow the filter(s) to become blocked or clogged. Do not allow foreign objects, such as cigarettes or napkins, to be sucked into the appliance.
12. Clean the filter(s) and all grease-laden surfaces often to prevent grease fires and maintain performance.
13. If the cooktop and range hood are near a window, use an appropriate window treatment. Avoid long drapes or other window coverings that could blow over the cooktop and ventilation system, resulting in a fire hazard.
14. Always run the fan(s) whenever the cooktop is operating.
15. Never leave the range or cooktop unattended when a burner (or element) is in use. Boil-overs and greasy spills may smoke and/or ignite.
16. Do not leave children alone or unattended in the area where the cooktop and ventilation system are in use. Never allow children to sit or stand on an appliance. Do not let children play with a range, cooktop or ventilation system. Do not store items of interest to children above or around the cooktop, range or range hood.

Product Specifications

General Specifications

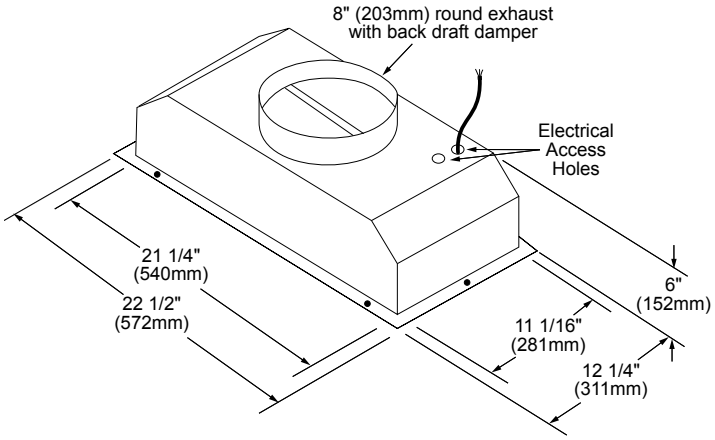
Filters	Mesh type, dishwasher safe
Lights	120 Vac, 75 W halogen
Total Circuit Requirements*	120 Vac, 60 Hz, 15 Amp Min. grounded , dedicated circuit
Total Connected Load*	IVS1: 0.2 kW (2 Amp) IVS2: 0.4 kW (3 Amp) IVSR1/IVSR2 0.2 kW (1.5 Amp) plus the power requirements of the in-line or remote blower connected.
Blower Rating	IVS1: 600 CFM, IVS2: 1200 CFM IVSR1 and IVSR2: Dependant on in-line or remote blower selected

***** Electrical specifications provided for reference only, consult product data label on the unit for exact specifications.

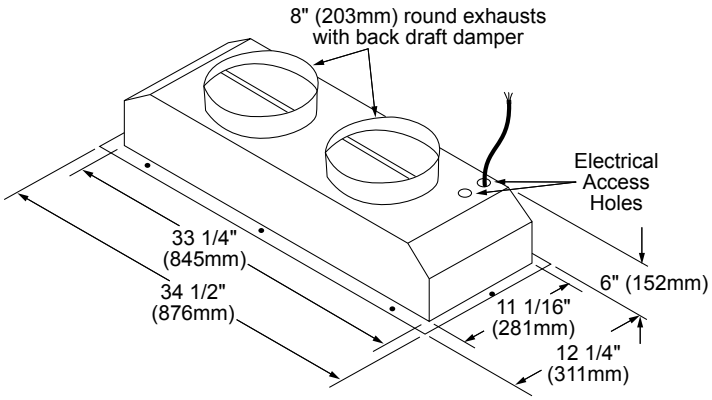
The Dacor Integrated Ventilation System (IVS) is designed for installation inside custom hood canopies. Proper installation of the IVS requires proper selection of the custom canopy materials and proper construction. Carefully and closely follow all instructions and warnings concerning the installation of the IVS within a combustible or non-combustible hood canopy. Make sure that all construction meets applicable local codes and regulations

Product Dimensions

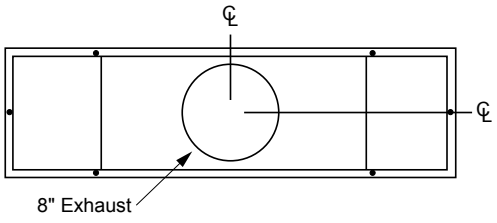
All dimensional tolerances are + 1/16”, - 0” (+1.6mm, -0) unless otherwise stated.



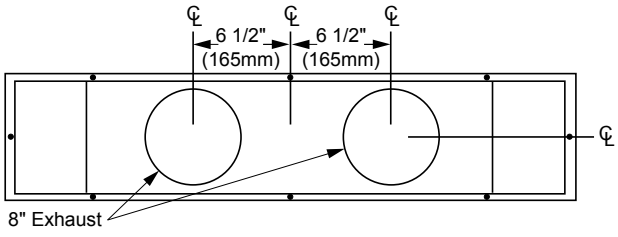
IVS1, IVSR1
Overall Dimensions



IVS2, IVSR2
Overall Dimensions



IVS1, IVSR1
Exhaust Placement
Top View



IVS2, IVSR2
Exhaust Placement
Top View

Installation Planning

Installation Requirements

⚠ WARNING

To reduce the risk of fire, plan the installation so that all minimum required clearances are met or exceeded. Dimensions provided are minimum clearances, unless otherwise noted.

- An Integrated Ventilation System (IVS) installed in a custom hood canopy constructed of combustible materials must be installed with the combustible material structure a minimum of 36” (914mm) above the appliance cooking surface.
- An IVS installed in a custom hood canopy that is constructed of non-combustible materials must be installed with the non-combustible material structure a minimum of 30” (762mm) above the appliance cooking surface.
- An IVS installed in a custom hood canopy that is constructed with a Dacor IHL series stainless steel hood liner must be installed with the non-combustible material structure a minimum of 30” (762mm) above the appliance cooking surface.
- The IVS must be mounted so that it can be removed if service is required. Make sure that the material around the edge of the cutout, behind the IVS mounting holes, is strong enough to hold the weight of the unit.

Electrical Requirements

⚠ WARNING

To Reduce the Risk of Fire And Electric Shock:

- The electric service to the IVS must be installed only by a licensed electrician.
- When installing models IVS1 and IVS2, install the unit only in conjunction in-line blower or remote blower models specified in these instructions. The maximum current rating for the blower must not exceed 7 Amps.

It is the owner’s responsibility to ensure that the electrical connection of this appliance is performed by a qualified electrician. The electrical installation, including minimum supply wire size and grounding, must be in accordance with the National Electric code ANSI/NFPA* (or latest revision) and local codes and ordinances.

*A copy of this standard may be obtained from:

National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269-9101

- The ground wire on this appliance must be connected to a grounded, metallic, permanent wiring system or grounding conductor installed by a licensed electrician.
- Do not ground the appliance or appliance wiring to a gas pipeline or to the neutral (white) power supply wire.
- Do not install a fuse in the neutral or ground circuit.
- Connect the IVS directly to an electrical junction box.
- The IVS needs to be hard wired, according to local code, directly to a dedicated three wire grounded, single phase circuit rated at 120 Vac 60 Hz, 15 Amps.

Planning the Duct Work

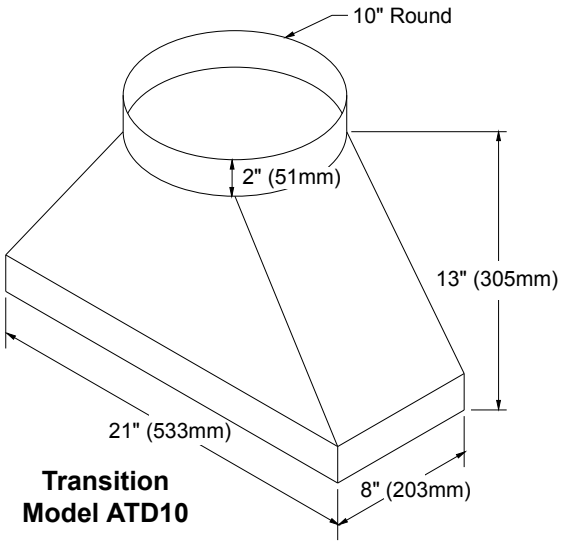
⚠ WARNING

- To reduce the risk of fire and to properly exhaust air, be sure to duct air outside the house or building. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces or garages.
- To prevent combustion by-products, smoke or odors from entering the home and to improve efficiency, tape all duct joints securely.
- Use only duct work deemed acceptable by state, municipal and local codes.
- Range hoods may interrupt the proper flow of smoke and combustion gases from furnaces, gas water heaters and fireplaces. To avoid drawing lethal gases into the home, follow the manufactures recommendation for these devices and consult NFPA and ASHRAE recommendations.
- When installing models IVS1 and IVS2, DO NOT install an additional in-line or external blower to increase the length of the duct run. Even small differences between blower air flow rates can greatly reduce the air draw by the hood.
- When installing models IVSR1 and IVSR2, DO NOT install more than one in-line or external blower to increase the length of the duct run. Even small differences between blower air flow rates can greatly reduce the air draw by the hood. Install only the in-line or remote blower models specified in these instructions.

Duct System Design Requirements

- All duct work materials (including screws and duct tape) must be purchased separately by the customer.
- Ducts must be of adequate size and duct runs should be as short and straight as possible. Where turns are necessary, keep the turning radius as large and smooth as possible.

- To prevent back-drafts, a damper at the duct outlet may also be required. The IVS comes equipped with a back-draft damper installed in the collar of the unit.
- Make sure duct work does not interfere with floor joists or wall studs.
- The hood exhaust connects to a 8-inch round duct. You can increase the duct size over the duct run if desired. To prevent a back draft, never decrease the duct size over the run. If existing duct work is smaller than 8 inches in diameter, remove it and replace it with 8-inch or 10-inch duct work.
- On dual exhaust models, the two 8” exhausts may be merged into on 10” duct using Dacor transition ATD10.



Transition
Model ATD10

- Do not rely on tape alone to seal duct joints. Fasten all connections with sheet metal screws and tape all joints with certified silver tape or duct tape. Use sheet metal screws as require to support the duct weight.
- Do not use flexible metal duct.
- Do not use duct work that is smaller in cross-sectional area than 8-inch round duct.

Additional Requirements for Models IVSR1 and IVSR2:

Models IVSR1 and IVSR2 are not equipped with an internal blower. Installation of an in-line or remote blower is required. See the table below for the correct model number.

DUCT WORK SIZE	IN-LINE BLOWER MODEL	REMOTE BLOWER MODEL
8-Inch	ILB8	REMP3
10-Inch	ILB10	REMP16

If installing an in-line blower (ILB8 or ILB10), it must be located within 50 equivalent feet of the IVS.

Calculating the Maximum Duct Run Length

The maximum straight duct length for the hood is determined by the type of duct used. See the chart below.

DUCT SIZE	MAXIMUM DUCT RUN
8-Inch Round	60 feet
10-Inch Round	50 feet
3¼” X 10” rectangular	50 feet

For each elbow and transition added to the duct work, a certain number of feet must be subtracted from the maximum duct run to compensate for wind resistance. To determine the length the duct work cannot exceed, subtract all of the equivalent lengths of the elbows and transitions listed below from the maximum duct run above.

Duct Work Equivalent Lengths

PIECE	SUBTRACT	PIECE	SUBTRACT
8” 90° elbow	7 feet	10” 90° elbow	5 feet
8” 45° elbow	3 feet	10” 45° elbow	2 feet
3¼” X 10” to round 90° transition	25 feet	3¼” X 10” to 8”/10” round transition	4 feet
3¼” X 10” 90° elbow	15 feet	3¼” X 10” 90° flat elbow	20 feet
3¼” X 10” 45° elbow	7 feet	Wall cap with damper	*
Roof cap	*		

* The equivalent lengths of roof and wall caps vary with model and configuration. For equivalent length, contact the manufacturer or a qualified HVAC specialist.

Duct Work Design Tips

When planning new duct work, always look for the shortest, most direct route to the outside.

Wherever possible, reduce the number of transitions and turns to as few sharp angles as possible. Two staggered 45° angles are better than one 90°.

Keep turns as far away from the hood exhaust as possible, and as much space between bends as possible.

For best performance, use round duct instead of rectangular, especially when elbows are required.

If multiple elbows are used, try to keep a minimum of 24” of straight duct between them. Avoid “S” or “back to back” use of adjacent elbows.

In regions where the weather gets extremely cold, use thermal breaks, such as a short section of non-metallic duct, to avoid indoor heat loss. Locate the break as close as possible to the outside pass through point.

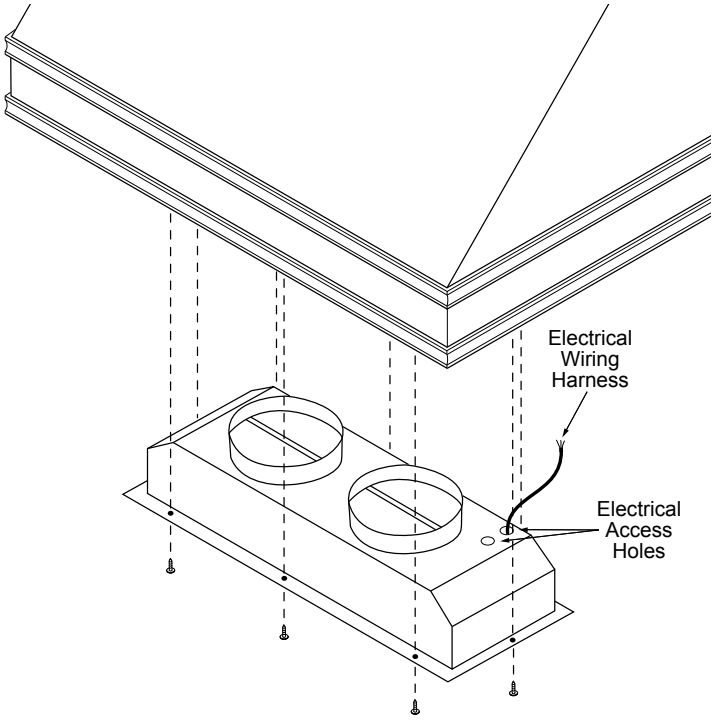
Installation Instructions

Installing the IVS

⚠ WARNING

To avoid an electric shock hazard, do not connect the wiring harness until after the IVS is installed in the cutout and the duct work is installed.

1. If installing a hood liner (Dacor series IHL) install it before installing the IVS.
2. Remove the filters from the IVS.
3. The IVS comes pre-wired from the factory. Insert the unit into the cutout while routing the wiring harness to the junction box.
4. While holding the IVS in place, attach it to the cutout with screws (not supplied) through the mounting holes around the edge.



Installing the Duct Work

⚠ WARNING

During duct installation, make sure there are no obstructions that keep the damper flaps on the top of the IVS from opening.

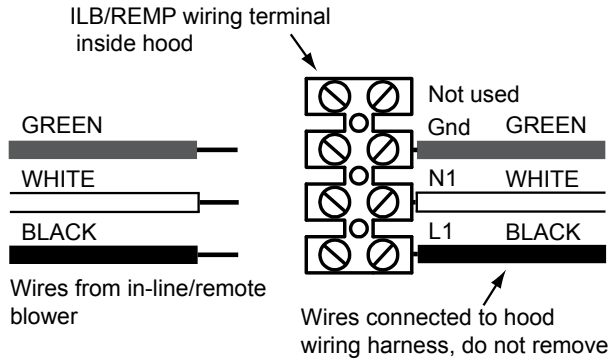
1. Models IVSR1 and IVSR2 only: Install the remote or in-line blower (see page 5 for specifications) according to the blower installation instructions.
2. Install the duct work starting from the hood working toward the outside vent. Observe the specifications on pages 4 and 5. Fasten all joints with sheet metal screws and seal with duct tape or certified silver tape. The duct work must be air tight. Use a minimum of two (2) sheet metal screws at every duct joint. Seal all duct joints with a high quality duct tape.

Electrical Connection

⚠ WARNING

- To avoid electric shock or fire hazard, prior to connecting the electrical wiring to the hood, make sure that power to the IVS power supply line is turned off at the fuse box or circuit breaker panel.
- Improper connection of the hood electrical wiring may create an electric shock or fire hazard and may result in damage to the hoods electrical system. See page 6 for specifications.
- Do not ground the hood to the neutral (white) power supply wire. Connect the hood ground wire to a separate, properly grounded wire installed by a licensed electrician.
- Make sure all wire used is capable of handling the total connected load. See page 3.
- If aluminum house supply wiring is used, splice the appliance copper wires to the aluminum house wiring with special connectors designed and agency-certified for this purpose. Follow the connector manufacturer's recommended procedure carefully. Improper connection can result in a fire hazard.

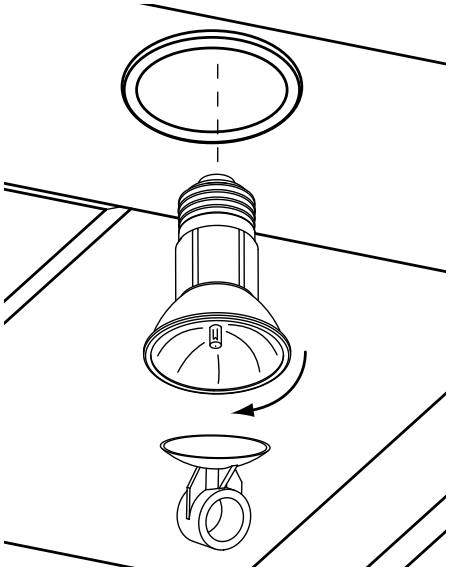
1. Models IVSR1 and IVSR2 only: Route the wiring from the in-line or remote blower into the IVS through one of the electrical access holes in the hood. Connect them to the remote blower (ILB8/REMP3) connection terminal as shown below. Match wire colors.



2. Connect the pre-wired, white and green wires to the corresponding black, white and ground (green) wire from the power source wiring. Use wire nut connectors to secure the connections.

Verifying Proper Operation

1. Install the filters.
2. Install the light bulbs.
   - Attach the included suction cup to one of the provided light bulbs.
   - Insert it into one of the light fixtures.
   - Screw it into place and remove the section cup.
   - Repeat for the remaining light fixtures.



3. Verify that the IVS control knobs are in the OFF position (fully counter-clockwise).
4. Turn on the main power supply at the circuit breaker panel or fuse box.
5. Turn the light and fan knobs clockwise and make sure the lights and fans operate properly.

If the hood does not operate properly, follow these troubleshooting steps:

- Verify that power is being supplied to the IVS.
- Check the electrical connections to ensure that the installation has been completed correctly.
- Repeat the above test.
- If the appliance still does not work, contact an authorized Dacor service company. If you are unable to locate a Dacor service company, please contact Dacor at (800) 793-0093, or visit us on the web at www.Dacor.com.

Do not attempt to repair the appliance yourself. Dacor is not responsible for service required to correct a faulty installation.

Installation Checklist

⚠ WARNING

- To ensure a safe and proper installation, the following checklist should be completed by the installer to ensure that no part of the installation has been overlooked.
- Proper installation is the responsibility of the homeowner. The importance of proper installation of your Dacor appliance cannot be overemphasized.

- ❑ Is the IVS properly attached to the cutout according to the instructions on page 6?
- ❑ Is the duct work completely installed? Are all joints attached with sheet metal screws and wrapped with duct tape? See page 6.
- ❑ Is the range hood wired and grounded according to these instructions and in accordance with all applicable electric codes? See pages 4 and 6.
- ❑ Are the filters properly installed according to the use and care manual?
- ❑ Has proper operation been verified?
- ❑ Has the warranty been activated on-line or the warranty card filled out completely and mailed?

Notes

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